



United States Steel
Clairton Works
400 State Street
Clairton, PA 15025-1855

August 8, 2001

Ms. Sandra Etzel
Allegheny County Health Department
Bureau of Air Pollution Control
301 39th Street
Pittsburgh, PA 15201

Dear Ms. Etzel:

Subject: Semi-Annual Report as Required by 40 CFR, Part 61, §61.138 of Subpart L for the Reporting Period of January 2001 through June 2001

This report is being submitted to you to full the provisions of 40 CFR, Part 61, Subparts L and V for the Reporting Period of January 2001 through June 2001. This report also fulfills the requirements of by 40 CFR, Part 61, §61.138(f).

Equipment in Benzene Service

Monthly audits of equipment in benzene service as defined in 40 CFR, Part 61, Subparts L and V have been conducted in accordance with Environmental Protection Agency (EPA) Reference Method 21, "*Determination of Volatile Organic Compound Leaks*." A Photovac MicroFID Organic Vapor Analyzer, or equivalent was used for monitoring. Gas standards of <1 parts per million (ppm) and 10,000 ppm of methane were used to zero and calibrate the instrument. Other standards of approximately 100 and 1000 ppm of methane were used to assure linearity of the instrument throughout the leak criteria range. Results of these monitoring events, including total components monitored and total leaking components identified, can be found in Table 1. Percent leakers are calculated on a quarterly basis, and are a ratio of total components leaking versus total components monitored. No leaks to any of the components were left unrepaired, and all leaks were fixed in the mandated 5/15-day period.

A revised component registry was submitted in U.S. Steel Clairton Works' previous semi-annual report. This revised registry is still valid and complete. A revised set of figures was also previously sent.

RECEIVED

JUL 16 2001

CHIEF ENFORCEMENT ASSOCIATE DIR. (CJA/RC)

Gas Blanketing Vessels

A total of 48 vessels comprising of Loops B, C, D, E, G, and H of the Coke Oven Gas Blanketing System were screened and visually inspected for leaks and abnormalities on June 15, 2001. The loops' ductwork and components were also monitored and inspected. No abnormalities or leaks were discovered in the blanketing systems. Eleven cases of access hatches being left open were found in the semi-annual audit. Table 2 and Table 3 summarize the vessels and loops monitored under this task, respectively.

A total of 6 vessels comprising of the Natural Gas Blanketing Loop for the Light Oil Storage Tank Area were screened and visually inspected for leaks and abnormalities in May 2001. The loops' ductwork and components were also monitored and inspected. No leaks were discovered in the blanketing system. No abnormalities in the blanketing systems were found during the monitoring event. Table 4 summarizes the vessels and loops monitored under this Task.

Difficult to Monitor Components

No annual audit of the components considered to be difficult to monitor was conducted during this reporting period. The next scheduled audit will occur in the second half of 2001. A plan to monitor these components has been previously submitted. No adjustments have been made to that plan during this reporting period.

Recordkeeping

A copy of this report is being maintained in the Benzene NESHAPs Program Manual on site. The benzene NESHAPs Program Manual is updated on a semi-annual basis, and includes a complete list of all regulatory requirements and process information pertinent to this program. This report, and a copy of all monthly summary reports, will be maintained on site for a minimum of two years in a readily accessible location.

If you should have any questions or comments, please call me at (412) 233-1015.

Sincerely,



Coleen M. Davis
Environmental Control Engineer

cc: Mr. James Hagedorn – USEPA Region III

Table 1. Summary of Total Equipment Monitored and Leaks Detected, Equipment in Benzene Service,
January 2001 through June 2001, USS Clarion Works, Clarion, Pennsylvania

	Monitoring Dates	Jan	Feb	Mar	Apr	May	Jun
Total Components Monitored	19 ^a	8 ^b /19 ^c	30 ^d	20 ^e	31 ^f	27 ^g /28 ^h	
Valves							
Components Monitored	23	280 ⁱ	46	46	271 ^j	26	
Leaks Detected	2	2010	14	14	1947	6	
Percent Leakers	0	14	0	0	6	0	
Components Not Repaired in S/I/S Period							
Components Requiring Delay of Repair	0	0	0	0	0	0	
Pumps/ Agitators							
Components Monitored	19	19	19	19	18	18	
Leaks Detected	0	0	0	0	0	0	
Percent Leakers							0.00%
Components Not Repaired in S/I/S Period	0	0	0	0	0	0	
Components Requiring Delay of Repair	0	0	0	0	0	0	
Open Braided Lines							
Components Monitored	2	724	12	12	703	2	
Leaks Detected	6	12	0	0	2	0	
Percent Leakers							0.23%
Components Not Repaired in S/I/S Period	0	0	0	0	0	0	
Components Requiring Delay of Repair	0	0	0	0	0	0	
Pressure Relief Valves							
Components Monitored	3	48	0	0	44	0	
Leaks Detected	0	0	0	0	0	0	
Percent Leakers							0.00%
Components Not Repaired in S/I/S Period	0	0	0	0	0	0	
Components Requiring Delay of Repair	0	0	0	0	0	0	
Flanges/Other Connectors							
Components Monitored	0	0	1	1	0	0	
Leaks Detected	0	0	0	0	0	0	
Percent Leakers							0.00%
Components Not Repaired in S/I/S Period	0	0	0	0	0	0	
Components Requiring Delay of Repair	0	0	0	0	0	0	

Table 2. Summary of Monthly Field Events for Tar Processing Blanketed Vessels, June 2001
USS Clariant Works, Clairton, Pennsylvania

REGISTRY #	NAME	TYPE	DIAMETER OR WIDTH	HEIGHT	VOLUME (GALS)	# OF NOZZLES/OPENINGS	TOP PROCESS AREA	COMMENTS
TB02	Flushing Liquor Weir Tank No. 1	Vert Cone	6	14	2,960		CR #5	Monitored-No abnormalities
TB03	Flushing Liquor Weir Tank No. 2	Vert Cone	6	14	2,960		CR #5	Monitored-No abnormalities
TB04	Flushing Liquor Decanter No. 1	Rect	28	12.5	80,000	10	CR #5	Monitored-One Hatches Left Open
TB05	Flushing Liquor Decanter No. 2	Rect	28	12.5	80,000	10	CR #5	Monitored-One Hatches Left Open
TB06	Flushing Liquor Decanter No. 3	Rect	28	12.5	80,000	46	CR #5	Monitored-One Leak Detected
TB07	Flushing Liquor Decanter No. 4	Rect	28	12.5	80,000	46	CR #5	Monitored-One Hatches Left Open
TB08	Flushing Liquor Decanter No. 5	Rect	28	12.5	80,000	46	CR #5	Monitored-One Hatches Left Open
TB09	Flushing Liquor Decanter No. 6	Rect	28	12.5	80,000	46	CR #5	Monitored-One Hatches Left Open
TB10	Flushing Liquor Decanter No. 7	Rect	28	12.5	80,000	44	CR #5	Monitored-One Hatches Left Open
TB11	Flushing Liquor Decanter No. 8	Rect	28	12.5	80,000	44	CR #5	Monitored-One Hatches Left Open
TB12	Flushing Liquor Decanter No. 9	Rect	28	12.5	80,000	44	CR #5	Monitored-One Hatches Left Open
TB13	Flushing Liquor Decanter No. 10	Rect	28	12.5	80,000	44	CR #5	Monitored-One Hatches Left Open
TB14	Flushing Liquor Decanter No. 11	Rect	28	12.5	80,000	36	CR #5	Monitored-One Hatches Left Open
TB15	Flushing Liquor Decanter No. 12	Rect	28	12.5	80,000	36	CR #5	Monitored-One Hatches Left Open
TC16	Tar Collecting Tank No. 1	Horiz Tank	10		24,000	8	CR #5	Monitored-No abnormalities
TC17	Tar Collecting Tank No. 2	Horiz Tank	10		24,000	8	CR #5	Monitored-No abnormalities
TC18	Tar Collecting Tank No. 3	Horiz Tank	10		24,000	8	CR #5	Monitored-No abnormalities
TC19	Tar Collecting Tank No. 4	Horiz Tank	10		24,000	8	CR #5	Monitored-No abnormalities
TC20	Flushing Liquor Surge Tank No. 1	Vert Tank	28.5	11	50,000	17	CR #5	Monitored-No abnormalities
TC21	Flushing Liquor Surge Tank No. 2	Vert Tank	28.5	11	50,000	17	CR #5	Monitored-No abnormalities
TD30	Flushing Liquor Weir Tank No. 1	Vert Cone	6	14	2,960		CR #5	Monitored-No abnormalities
TD31	Flushing Liquor Weir Tank No. 2	Vert Cone	6	14	2,960		CR #5	Monitored-No abnormalities
TD32	Flushing Liquor Decanter No. 1	Rect	28	12.5	80,000	46	CR #5	Monitored-One Hatches Left Open
TD33	Flushing Liquor Decanter No. 2	Rect	28	12.5	80,000	46	CR #5	Monitored-One Hatches Left Open
TD34	Flushing Liquor Decanter No. 3	Rect	28	12.5	80,000	46	CR #5	Monitored-No abnormalities
TD35	Flushing Liquor Decanter No. 4	Rect	28	12.5	80,000	46	CR #5	Monitored-One Hatches Left Open
TD36	Flushing Liquor Decanter No. 5	Rect	28	12.5	80,000	48	CR #5	Monitored-One Hatches Left Open
TD37	Flushing Liquor Decanter No. 6	Rect	28	12.5	80,000	48	CR #5	Monitored-No abnormalities
TD38	Flushing Liquor Decanter No. 7	Rect	28	12.5	80,000	46	CR #5	Monitored-No abnormalities
TD39	Flushing Liquor Decanter No. 8	Rect	28	12.5	80,000	46	CR #5	Monitored-One Hatches Left Open

usclatfac0125Reports1999Semi1pt

Tar Gas Blanketing

7/20/2001

ED_002508A_00001289-00004

Table 2. Summary of Monthly Field Events for Tar Processing Blanketed Vessels, June 2001
USS Clairton Works, Clairton, Pennsylvania

REGISTRY #	NAME	TYPE	DIAMETER OR WIDTH	HEIGHT	VOLUME (GALS)	# OF NOZZLES/OPENINGS	TOP PROCESS AREA	COMMENTS
TD40	Flushing Liquor Decanter No. 11	Rect	28	12.5	80,000	42	12	CR #3 Monitored-One Hatch Left Open
TD41	Flushing Liquor Decanter No. 12	Rect	28	12.5	80,000	42	12	CR #5 Monitored-One Hatch Left Open
TE42	Tar Collecting Tank No. 1	Horiz Tank	10	20,000	5	8	CR #5	Monitored-No abnormalities
TE43	Tar Collecting Tank No. 2	Horiz Tank	10	20,000	5	8	CR #5	Monitored-No abnormalities
TE44	Tar Collecting Tank No. 3	Horiz Tank	10	20,000	5	8	CR #5	Monitored-No abnormalities
TE45	Tar Collecting Tank No. 4	Horiz Tank	10	20,000	5	8	CR #5	Monitored-No abnormalities
TE46	Flushing Liquor Surge Tank No. 1	Vert Tank	28.5	13	60,000	17	14	CR #5 Monitored-No abnormalities
TE47	Flushing Liquor Surge Tank No. 2	Vert Tank	28.5	13	60,000	17	14	CR #5 Monitored-No abnormalities
TE48	Primary Cooler Condensate Tank No. 1	Horiz Tank	10	10,000	17	9	CR #5	Monitored-No abnormalities
TE49	Primary Cooler Condensate Tank No. 2	Horiz Tank	10	10,000	17	9	CR #5	Monitored-No abnormalities
TF50	Tar Storage Tank No. 1	Vert Tank	45	45	500,000	30	8	PC Monitored-No abnormalities
TF51	Tar Storage Tank No. 2	Vert Tank	45	45	500,000	30	8	PC Monitored-No abnormalities
TF52	Tar Storage Tank No. 3	Vert Tank	45	45	500,000	30	8	PC Monitored-No abnormalities
TF53	Tar Storage Tank No. 4	Vert Tank	45	45	500,000	36	8	PC Monitored-No abnormalities
TF54	Tar Storage Tank No. 5	Vert Tank	45	45	500,000	36	8	PC Monitored-No abnormalities
TF55	Tar Storage Tank No. 6	Vert Tank	45	45	500,000	30	8	PC Monitored-No abnormalities
TF56	Tar Storage Tank No. 7	Vert Tank	45	45	500,000	30	8	PC Monitored-No abnormalities
TF57	Tar Storage Tank No. 8	Vert Tank	45	45	500,000	30	8	PC Monitored-No abnormalities
TF58	Tar Storage Tank No. 9	Vert Tank	45	45	500,000	30	8	PC Monitored-No abnormalities
TF59	Liquor Tank No. 1	Vert Tank	45	500,000	31	8	PC	Monitored-No abnormalities
TF60	Liquor Tank No. 2	Vert Tank	45	45	500,000	31	8	PC Monitored-No abnormalities
TG61	T-3 Contaminated Water Tank	Vert Tank	100	52	3,000,000	27	8	WT Monitored-Seal Pot Leaking
TG62	Wastewater Tank #1	Vert Tank	40	25	200,000	21	8	WT Monitored-No abnormalities
TG63	Wastewater Tank #2	Vert Tank	40	25	200,000	21	8	WT Monitored-No abnormalities
TH64	Final Cooler Water Pump Compartment	Vert Tank					CR #1	Monitored-No abnormalities
TH65	West Final Cooler Sump S200	Sump	12	9	66,667	9	9	CR #1 Monitored-No abnormalities
TH66	Middle Final Cooler Sump S205	Sump	12	9	66,667	7	8	CR #1 Monitored-No abnormalities
TH67	East Final Cooler Sump S204	Sump	12	9	66,667	7	7	CR #1 Monitored-No abnormalities

Table 3. Summary of Monthly Field Events for Tar Processing Blanketed Loops, June 2001
USS Clairton Works, Clairton, Pennsylvania

REGISTRY #	NAME	LOCATION	# OF VALVES	COMMENTS
LB82	Loop B Inlet	On top of TB15	7	Monitored: No abnormalities
LB83	Loop B Outlet	On top of TB04	5	Monitored: No abnormalities
LC84	Loop C Inlet	On top of TC21	7	Monitored: No abnormalities
LC85	Loop C Outlet	On top of TB04	5	Monitored: No abnormalities
LD86	Loop D Inlet	On top of TD32	7	Monitored: No abnormalities
LD87	Loop D Outlet	On top of TD41	6	Monitored: No abnormalities
LE88	Loop E Inlet	On top of TE42	6	Monitored: No abnormalities
LE89	Loop E Intermediate	On top of TE45	5	Monitored: No abnormalities
LE89	Loop E Outlet	On top of TE49	7	Monitored: No abnormalities
LF90	Loop F Inlet	SW of TF55	5	Monitored: No abnormalities
LF91	Loop F Outlet	E of TF55	7	Monitored: No abnormalities
LG92	Loop G Inlet	Near TF60 & TG63	5	Monitored: No abnormalities
LG93	Loop G Outlet	Near TF59 & TG62	5	Monitored: No abnormalities
LH94	Loop H Inlet	On top of TH64	6	Monitored: No abnormalities
LH95	Loop H Outlet	On top of TH65	6	Monitored: No abnormalities

Table 4. Summary of Monthly Field Events for Light Oil Storage Blanketed Vessels, May 2001
USS Clairton Works, Clairton, Pennsylvania

REGISTRY #	NAME	TYPE	DIAMETER OR WIDTH	HEIGHT	VOLUME (GALS)	# OF NOZZLES	TOP OPENINGS	PROCESS AREA	COMMENTS
T-59	Light Oil Storage Tank No. 59	Vert Cone				3	6	LO	Monitored-No abnormalities
T-60	Light Oil Storage Tank No. 60	Vert Cone				3	6	LO	Monitored-No abnormalities
T-61	Light Oil Storage Tank No. 61	Vert Cone				3	6	LO	Monitored-No abnormalities
T-62	Light Oil Storage Tank No. 62	Vert Cone				3	6	LO	Monitored-No abnormalities
T-63	Light Oil Storage Tank No. 63	Vert Cone				3	6	LO	Monitored-No abnormalities
T-64	Light Oil Storage Tank No. 64	Vert Cone				3	6	LO	Monitored-No abnormalities